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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/695,325 | 10/28/2003 | Jurgen Ludwig | 17024 | 6051 |
| 23389 | 7590 | 05/18/2005 | EXAMINER | |
| SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530 | | | LEE, WILSON | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2821 | |

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,325

Applicant(s)

LUDWIG ET AL.

Examiner

Wilson Lee

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed on 2/25/04 have been fully considered but they are not persuasive.

Applicant argues that Mashburn fails to disclose a lamp being operated with a dc voltage having voltage pulses superimposed thereon.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., with a dc voltage having voltage pulses superimposed thereon) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As pointed out in the previous office action, Mashburn discloses that the high voltage pulses in oscillations are superimposed on the DC voltage applied to the lamp. Since the pulses are in oscillations, therefore they form a sequence and are repetitive.

Applicant argues that Osterried discloses ignition pulses but fails to disclose voltage pulses.

Examiner respectfully disagrees.

Ignition pulses are voltage pulses indeed. Those ignition pulses are superimposed on the dc voltage shown in a voltage (U) graph of figure 2.

Claim Rejections – 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 1 and 11, "sequence of repetitive voltage pulses" is vague because it is not concluded in the specification.

Claims 3-10, 12-15 are indefinite by virtue of their dependency on claims 1 and 11.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Mashburn, III et al. (5,962,984).

Regarding Claim 1, Mashburn discloses a method of operating a gas-discharge lamp wherein the lamp is operated at least in part with a dc voltage component, characterized in that a sequence of repetitive voltage pulses (high voltage pulses) are superimposed on the lamp dc voltage component (DC voltage) during the running operation of the lamp (See Col. 2, lines 35-43).

Regarding Claim 3, Mashburn discloses that the voltage pulses are ach sinusoidal (high frequency, AC source frequency) and decaying (damped oscillations) in configuration (See Col. 2, lines 37-41).

Regarding Claim 11, Mashburn discloses a power supply unit for the operation of a gas discharge lamp, wherein the lamp is operated at least in part with a DC voltage component comprising a running voltage source (38) for supplying the dc voltage (See Col. 2, lines 62-65) and a pulse source (output transformer T1) for superimposing a sequence of repetitive voltage pulses on the DC voltage during the running operation of the lamp (See Col. 2, lines 35-43).

Regarding Claim 12, Mashburn discloses a power supply unit comprising means (terminal 16) for heating the lamp electrodes (22, 26) and means (32) for pole reversal (relay poled voltage) of the lamp.

Claims 1, 3-5, 7, 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Osterried et al. (5,770,924).

Regarding Claim 1, Osterried discloses a method of operating a gas-discharge lamp wherein the lamp is operated at least in part with a dc voltage component (U1), characterized in that voltage pulses (ignition pulses) are superimposed on the lamp dc voltage component (direct voltage U1) (See Col. 3, lines 21-25).

Regarding Claim 3, Osterried discloses that the voltage pulses are each sinusoidal (sinusoidal wave shown in period T4) and decaying in configuration (decaying shown in period T4) (See Figure 2A).

Regarding Claim 4, Osterried discloses that the voltage pulses have a repetition rate of at least 100 Hz during the running operation of the lamp (90 to 150Hz when pulses are first energized during period T1) and a natural frequency (nominal frequency during period T4. See Col. 3, lines 52-55), which is higher than the repetition rate.

Regarding Claim 5, Osterried discloses that the dc voltage component being reduced would inherently reduce the brightness of the lamp because the load receives less voltage and is being less energized.

Regarding Claim 7, Osterried discloses that the voltage or the energy of the voltage pulses being selectively reduced would reduce the brightness of the lamp because the load receives less voltage and is being less energized.

Regarding Claim 9, Osterried discloses that the lamp is repeatedly subjected to a pole reversal (reverse polarized with respect to current I2; full-wave bridge VB change polarity) (See Col. 3, lines 41-44; Col. 5, lines 18-20).

Regarding Claim 10, Osterried discloses that the cathode of the lamp is heated (reached emission temperature), wherein the heating power is only selected to be so great that an increase in the heating power does not cause any further reduction in the running voltage of the lamp (with continuous direct current during which the electrode of the lamp which then functions as anode has reached emission temperature) (See abstract).

Regarding Claim 11, Osterried discloses a power supply unit for the operation of a gas discharge lamp, wherein the lamp is operated at least in part with a dc voltage component comprising a running voltage source (SV) for supplying the dc voltage (U1) and a pulse source (VB) for superimposing a sequence of repetitive voltage pulses (ignition pulses) on the DC voltage during the running operation of the lamp (See Col. 3, lines 20-25).

Regarding Claim 12, Osterried discloses a power supply unit comprising a means (Z) for heating the lamp electrodes of lamp (LP) (See abstract and Figure 4), means (ZG2) for pole reversal (timing circuit changes polarity of the lamp (See Col. 5, lines 1-26), and means (sensor unit S) for measuring the lamp running voltage.

Regarding Claim 13, Osterried discloses that the dc voltage component (U1) is reduced to zero (See the graph in Figure 2A. U1 may be reduced to zero).

Claim Rejections – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osterried et al. (5,770,924) in view of Zwikker.

Regarding Claims 14 and 15, Osterried discloses his invention for operating a discharge lamp but does not explicitly disclose a fluorescent lamp. However, Zwikker (page 3) discloses that fluorescent lamp is also a gas discharge lamp having a number of advantages. Since fluorescent lamp is one of all discharge lamps, thus it would have been obvious to one of ordinary skill in the art to obtain higher light output, longer lamp life, etc as taught by Zwikker.

Allowable subject matter

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Claims 6 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 2 is allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests the following limitations, in combination with the remaining elements disclosed in claim 2:

the lamp is selectively operated in the upper brightness range with a dc voltage, with dc voltage and superimposed voltage pulses and with a high-frequency ac voltage while it is operated in the lower brightness range with dc voltage and superimposed repetitive voltage pulses and only with repetitive voltage pulses, during the running operation of said lamp.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

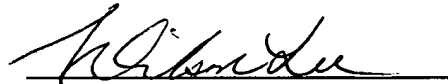
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Wilson Lee", written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

5/14/05